

Ana Flores

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EDUCATION

- 2026 University of Hawai‘i at Mānoa, Ph.D. (post-candidacy), Botany with graduate specialization in Ecology, Evolution, and Conservation Biology. Major advisor: Dr. Kasey Barton, Professor, Associate Director
- 2022 Organización para Estudios Tropicales, Universidad de Costa Rica. Tropical Biology: An Ecological Approach (Costa Rica). Field based experience in experimental ecology (Graduate program)
- 2018 Florida International University, B.S., Biological Sciences. Major advisor: Dr. Jennifer Richards, Professor Emeritus

RESEARCH

- 2019-2025 Graduate researcher (PhD program). University of Hawai‘i. Barton Functional Ecology Lab. Dissertation: (tent.) “The Simultaneous Effects of Ontogeny and Phenotypic Plasticity on Ontogenetic Trajectories of Plant Functional Traits.”

Completing a dissertation of two experimental chapters and one meta-analytical chapter on ontogenetic (leaf) functional trait variation. Used eco-physiological and chemical analytical methods to analyze plant form and function across development in the greenhouse, field, and lab. Used standardized protocols for research synthesis: targeted searches, metadata extraction, and effect size estimation of ontogenetic stage trait variation focusing on early stages.
- 2024 Collaborator/Researcher. University of Hawai‘i. Barton Functional Ecology Lab. Data collection and reporting for a book chapter on world-wide occurrence of plant spinescence from published and unpublished species lists and herbaria records (See publications below). PI: Dr. Kasey Barton
- 2018-2019 Research Assistant. Florida International University GIS and Remote Sensing Center. Digitizing historical landscape photos and analyzing morphology of Everglades National Park creeks and riverways using ESRI GIS and DAT/EM Summit (photogrammetry). PI(s): Dr. Jennifer Richards, Dr. Daniel Gann
- 2018 Research Intern. Florida International University, Richards Macrophyte Lab. Image analysis and mapping of soil core data collected during the Everglades REMAP initiative 2013-2015, using ImageJ and ESRI GIS. (Poster presented). Advisor: Dr. Jennifer Richards.
- 2017-2019 Research Assistant. Florida International University, Richards Macrophyte Lab.

Greenhouse experiment setup, maintenance, and measuring performance and growth of an invasive *Lygodium* species fern. Organizing and recording field survey photos and data. Advisor: Dr. Jennifer Richards, Graduate student mentor: PhD candidate Nicole Sebesta

- 2017 Research Intern. NSF Research Experience for Undergraduates. Plant Ecology and Conservation Program, Chicago Botanic Garden. Independent research on seedling frost tolerance using a common restoration species which seeds were provenanced across a South to North regional gradient. (Poster presented). Advisor(s); Drs. Andrea Kramer and Jeremie Fant, Christopher Woolridge, M.S. Supported by NSF REU Grant DBI-1461007.
- 2017 Undergraduate Research Assistant. Florida International University, Conservation Genetics Lab. Advisor: Dr. Eric Bishop von Wettberg

PUBLICATIONS

Barton, K. E., Carpenter, J., **Flores, A.**, Saez, L., Armani, M. (2024). Spinescence and the Island Plant Syndrome. In Moreira, X., and Abdala-Roberts, L. (Eds.), Ecology and evolution of plant-herbivore interactions on islands. Springer.

Woolridge, C.B., Fant, J.B., **Flores, A.I.**, Schultz, K. and Kramer, A.T. (2023), Variation in overall fitness due to seed source: projections for predictive provenancing. *Restor Ecol*, 31: e13717. <https://doi.org/10.1111/rec.13717>

(*In review*) **Flores, A.I.**, Simmons, Z., Bingham, J.P., Barton, K.E. Phenotypic plasticity of ontogenetic patterns of plant functional traits. *First dissertation chapter*

(*In preparation*) **Flores, A.I.**, Barton, K.E. Phenotypic plasticity to drought in the cotyledon stage of a heteroblastic island endemic. *Abstract accepted for Annals of Botany special issue*

PRESENTATIONS

‡*Undergraduate*; ◇*Poster*; §*Community Outreach*

- 2025 Botany conference (Botanical Society of America annual meeting). Palm Springs, CA
- 2024 ESA (Ecological Society of America annual meeting). Long Beach, CA
- 2024 § Hawai‘i Experimental Tropical Forest Webinar. Institute of Pacific Islands Forestry. Hilo, HI
- 2023 Plant Form and Function special lecture. University of Hawai‘i at Mānoa
- 2022 § Plant of the Month Feature (*Lygodium microhyllum*). Hawai‘i Botanical Society Meeting
- 2022 Botany conference (BSA annual meeting). Anchorage, AK
- 2022 46th Albert L. Tester Research Symposium. University of Hawai‘i at Mānoa
- 2022 Evoluncheon. EECB (Ecology, Evolution, and Conservation Biology) Seminar Series. University of Hawai‘i at Mānoa
- 2021 ESA virtual (ESA annual meeting)
- 2021 Botany virtual conference (BSA annual meeting)
- 2018 ‡◇ GIS Day. Florida International University and the GIS & Remote Sensing Center

- 2017 ‡◇ Southeastern Ecology and Evolution Conference (SEEC). Fort Myers, FL
 2017 ‡◇ REU Research Symposium. Chicago Botanic Garden. Glencoe, IL

AWARDS & GRANTS

- 2024 Mala Bridges award in Botany (\$1600). School of Life Sciences, University of Hawai‘i
 2024 Physiological Ecology Section Travel Award (\$400). Ecological Society of America Annual Meeting Long Beach, CA
 2023 Harold and Elizabeth St. John Endowed Scholarship (\$5000). School of Life Sciences, University of Hawai‘i
 2023 Outstanding Teaching Assistant Award (\$500). School of Life Sciences, University of Hawai‘i
 2022 LICOR Oral Presentation Award (\$150). Physiological Section, Botanical Society of America Annual Meeting, Anchorage, AK
 2022 Best Graduate Talk (\$1000). Tester Research Symposium, School of Life Sciences, University of Hawai‘i
 2022 Maybelle F. Roth Award in Conservation Biology (\$5000). Ecology, Evolution, and Conservation Biology Graduate Program, and supported by ARCS Foundation – Honolulu
 2021 George and Mona Elmore ARCS Award in Botany (\$5000). ARCS Foundation – Honolulu

SERVICE & COMMUNITY ENGAGEMENT

- 2025 Professional Learning Workshop (Online). Planting Science F2 Digging Deeper Initiative.
 2024 Panelist, Belonging in Botany: Perspectives on Success in the Botanical Sciences. Botany conference 2024
 2023-2024 Organizer/Presenter, Teaching a Science Lab Workshop. Teaching Assistant Training, University of Hawai‘i at Mānoa
 2023 Junior Botanist: Plant Exploration event. Liliha Public Library Summer Reading Program.
 2023 Organizer, 47th Albert L. Tester Research Symposium. School of Life Sciences, University of Hawai‘i at Mānoa
 2022 Social Events Subcommittee member. 46th Albert L. Tester Research Symposium, School of Life Sciences, University of Hawai‘i at Mānoa
 2022-2024 Early Career Advisory Board member. Botanical Society of America
 2021 Outreach Coordinator, BSA Hawai‘i Student Chapter. University of Hawai‘i at Mānoa
 2021-2024 Graduate Student Representative. Ecology, Evolution, and Conservation Biology (EECB) Graduate Specialization Program. University of Hawai‘i at Mānoa
 2020 – Pres Liaison/Mentor, Master Planting Science Team. Planting Science (BSA)

Mentored: undergraduates in the PLANTS program (BSA) – Victor Melendez, Amaya Roberts, Cesar Avila, Al Lichamer; high school intern from College First Program (IL, USA) – Kyrel McDavid

Ad hoc reviewer for *Annals of Botany*

Local cleanups and restoration work with organizations including: 808Cleanups; Pu‘ulani community workdays with Kāko‘o ‘Ōiwi; Paepae o He‘e‘eia; invasive algae removal with Mālama Maunaloa

TEACHING

(Teaching Assistant)

Plant Form and Function lab (BOT420L) – Spring semesters only, 2020-2026

Advanced Topics in Marine Biology (writing intensive capstone course) (BIOL404) – Fall 2024, 2025

Marine Ecology and Evolution lab (BIOL301L) – Spring 2024

Plants, People, Culture (Ethnobotany) (BOT107) – Fall semesters only, 2020-2023

Resource Management and Conservation Biology (BOT350) – Fall 2019

PROFESSIONAL AFFILIATIONS

Hawai‘i Botanical Society (Since 2021)

Botanical Society of America Hawai‘i Student Chapter (Since 2021)

Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)
(Since 2020)

Ecological Society of America (ESA) (Since 2018)

Botanical Society of America (BSA) (Since 2017)